ABSTRACT

A rotary fluid device comprises: a cylinder (**21**) having an annular cylinder chamber (**50**); an annular piston (**22**) which is accommodated in the cylinder chamber (**50**) to be eccentric relative to the cylinder (**21**), the annular piston (**22**) dividing the cylinder chamber (**50**) into an outer working chamber (**51**) and an inner working chamber (**52**); and a blade (**23**) placed in the cylinder chamber (**50**) and partitioning each of the working chambers (**51, 52**) into a high-pressure space and a low-pressure space. The cylinder (**21**) and the piston (**22**) relatively rotate. The outer working chamber (**51**) constitutes a compression chamber which compresses and discharges a sucked fluid with the progress of the relative rotation of the cylinder (**21**) and the piston (**22**). The inner working chamber (**52**) constitutes an expansion chamber which expands and discharges a sucked fluid with the progress of the relative rotation of the cylinder (**21**) and the piston (**22**).